From: Miller, Garyg

To: <u>Hayter, Earl J ERDC-RDE-EL-MS</u>

Subject: RE:

Date: Tuesday, February 03, 2015 2:22:00 PM

Earl,

Here's something else about stream stability (from Federal Highway Administration) - http://www.fhwa.dot.gov/engineering/hydraulics/pubs/hec/hec11sl.pdf

"In addition, current site conditions can be used to evaluate river stability. Even when historic information indicates that a channel has been relatively stable in the past, local conditions may indicate more recent instabilities. Local site conditions which are indicative of channel instabilities include tipping and falling of vegetation along the bank, cracks along the bank surface, the presence of slump blocks, fresh vegetation laying in the channel near the channel banks, deflection of channel flows in the direction of the bank due to some recently deposited obstruction or channel course change, fresh vertical face cuts along the bank, locally high velocities along the bank, new bar formation downstream from an eroding bank, local headcuts, pending or recent cutoffs, etc... It is also important to recognize that the presence of any one of these conditions does not in itself indicate an erosion problem; some bank erosion is common in all channels even when the channel is stable. A more detailed coverage of the analysis of stream stability through the use of historic and current observations is presented in Shen (1). Analytic methods for the evaluation of channel stability can be classified as either geomorphic or hydraulic. It is important to recognize that these analytic tools should only be used to substantiate the erosion potential indicated through observation. Geomorphic relationships have been presented by many investigators, for example Leopold (2), and Lane (3). More recently these relationships have been summarized by Brown (4), and Richardson (5)."

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Gary Miller
EPA Remedial Project Manager
214-665-8318
miller.garyg@epa.gov
----Original Message-----
From: Hayter, Earl J ERDC-RDE-EL-MS [mailto:Earl.J.Hayter@erdc.dren.mil]
Sent: Tuesday, February 03, 2015 2:07 PM
To: Miller, Garyg
Subject: RE:
Thanks Gary. Maynord retired a year or two ago.
> -----Original Message-----
> From: Miller, Garyg [mailto:Miller.Garyg@epa.gov]
> Sent: Tuesday, February 03, 2015 3:06 PM
> To: Hayter, Earl J ERDC-RDE-EL-MS
> Subject: RE:
> Earl.
> Here is the link -
> http://www.epa.gov/glnpo/sediment/iscmain/appnda.pdf
> Just noticed its written by Steve Maynord @ Vicksburg - perhaps you
> know him?
> Regards,
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> Gary Miller
> EPA Remedial Project Manager
> 214-665-8318
> miller.garyg@epa.gov
> -----Original Message-----
> From: Hayter, Earl J ERDC-RDE-EL-MS
> [mailto:Earl.J.Hayter@erdc.dren.mil]
> Sent: Tuesday, February 03, 2015 1:48 PM
> To: Miller, Garyg
> Subject:
> Gary,
> Which capping guidance report were you referring to during our call
> earlier today? There are several different 'versions'.
> Thanks,
> Earl
> Earl J. Hayter, Ph.D.
> U.S. Army Corps of Engineers
> Engineer Research and Development Center Environmental Laboratory
> Vicksburg, MS 39180
> Duty Station:
> Clemson University
> 302A Lowry Hall
> Clemson, SC 29634
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